

Biological Resources



The EIR section addresses the
existing biological resources;
project impacts; and
mitigation measures to reduce impacts
to less than significant levels.

The analysis is based on the
Biological Technical Report
prepared by BonTerra Consulting.

Regulatory Setting

The evaluation of impacts is based on applicable laws, codes, and standards that govern biological resources.

These include:

- Federal Endangered Species Act
- Sections 404 and 401 of the Clean Water Act of 1972
- Migratory Bird Treaty Act of 1918
- Bald and Golden Eagle Protection Act of 1940
- California Endangered Species Act
- California Environmental Quality Act
- California Coastal Act
- Streambed Alteration - Fish and Game Code
- Native Plant Protection - Fish and Game Code
- Natural Communities Conservation Plan - Fish and Game Code
- California Fully Protected Species - Fish and Game Code
- Nesting Bird Protection - Fish and Game Code
- California Code of Regulations Title 14
- California Porter-Cologne Water Quality Control Act

Methodology

2008 through 2011 - General/focused biological surveys were conducted BonTerra Consulting under contract to the City

1998 through 2002, 2006 through 2011 – Biological surveys were conducted by Glenn Lukos Associates (GLA) for the Applicant

Where time frames overlapped, and GLA was performing focused surveys efforts, BonTerra shadowed the surveys to verify observations

Literature Search

Literature search was conducted to identify special status plants, wildlife, and habitats:

- CNPS's Electronic Inventory of Rare and Endangered Vascular Plants of California
- CDFG's California Natural Diversity Database



Methodology

Vegetation Mapping and Plant Surveys

- Vegetation mapping and general plant surveys: September 2009, and January and October 2010.
- Special status plant surveys: March, April, May, June, July, and August 2009
- GLA conducted focused plant surveys for the Applicant in 2006, 2007, and 2008



Jurisdictional Delineation

- Federal jurisdiction - “Waters of the U.S.” and wetland resources identified per USACE standards
- State of California jurisdiction - “Waters of the State” – generally include riparian habitats supported by a river, stream, or lake
- Coastal Commission jurisdiction - within the Coastal Zone, Coastal Commission generally requires the presence of only one of the three parameters (e.g., hydrology, hydric soils, or hydrophytic vegetation)

Methodology

Wildlife Surveys

General wildlife surveys were conducted during vegetation surveys and during all focused surveys in 2009, 2010, and 2011.

Focused wildlife surveys were conducted for:

- fairy shrimp (dry/wet season, multiple years)
- burrowing owl (wintering/breeding season, multiple years)
- coastal California gnatcatcher (2006, 2007, and 2009)
- southwestern willow flycatcher (2006, 2007, and 2009)
- least Bell's vireo (2006, 2007, and 2009)



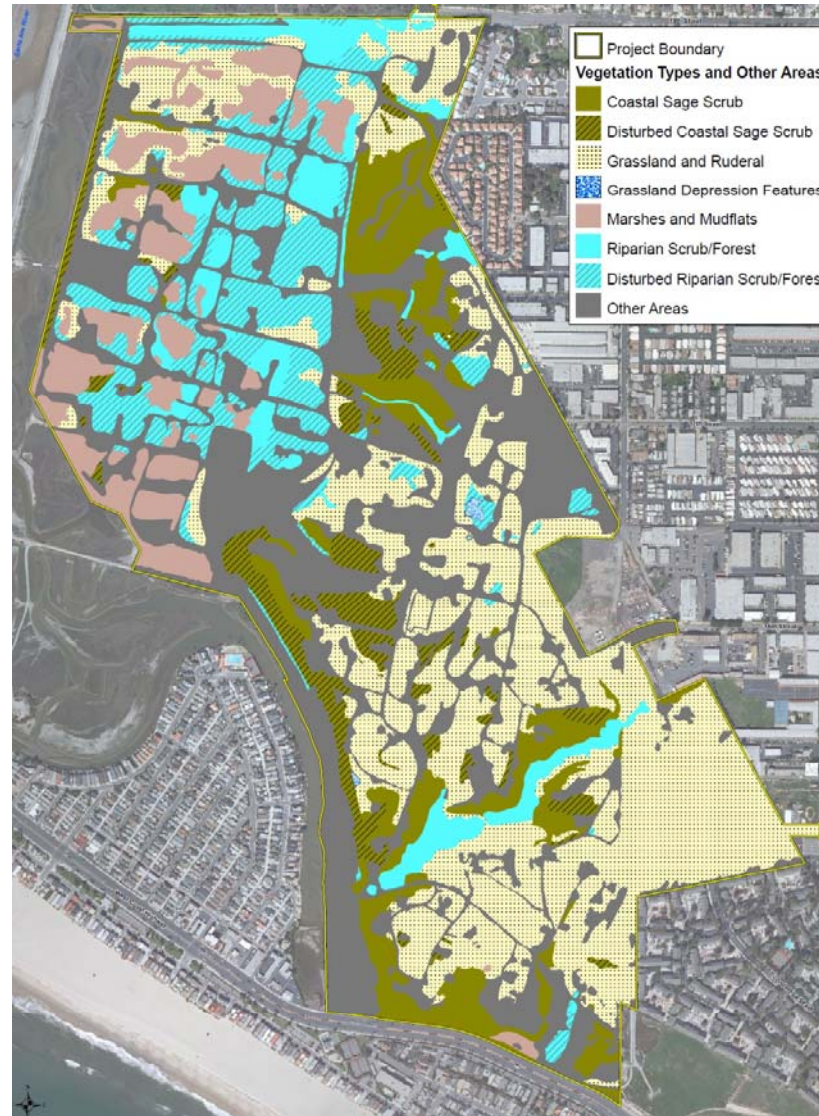
Existing Conditions

Vegetation Types

8 vegetation types (45 sub-types)

| Vegetation Type | Existing (Acres) | Percent of Project Site |
|-------------------------------------|------------------|-------------------------|
| Coastal Sage Scrub | 37.63 | 9.3% |
| Disturbed Coastal Sage Scrub | 20.64 | 5.1% |
| Grassland and Ruderal | 120.4 | 29.8% |
| Grassland Depression Features | 0.4 | 0.1% |
| Marshes and Mudflats | 31.45 | 7.8% |
| Riparian Scrub/Forest | 21.71 | 5.4% |
| Disturbed Riparian Scrub/Forest | 38.87 | 9.6% |
| Other Disturbed and Developed Areas | 133.15 | 32.9% |
| <i>Total</i> | <i>404.25</i> | <i>100.0%</i> |

Existing Conditions



Existing Conditions

Wildlife

Wildlife species observed or expected on site:

| | | | |
|----------------------------|---------------------------|----------------------|----------------------|
| California treefrog | garden slender salamander | western fence lizard | side-blotched lizard |
| California ground squirrel | black rat | Virginia opossum | coyote |

Bird species are the most common/varied wildlife on site. Common and resident species frequently observed include:

| | | | |
|--------------------|-------------------|------------------|-----------------|
| great blue heron | great egret | killdeer | mourning dove |
| black phoebe | American crow | bushtit | house wren |
| Anna's hummingbird | European starling | American kestrel | red-tailed hawk |

Special Status Biological Resources

Special Status Species are defined by the:


USFWS - federally Endangered, Threatened, Proposed or Candidate Species

California - State Endangered, Threatened, Fully Protected, Rare species, California Species of Special Concern, Special Animal or Watch List

Conservation Organizations - Species of Local Concern are those that have no official status with the resource agencies, but are being watched because either there is a unique population in the region

CNPS - List 1B to List 4

Special Status Biological Resources

|  Plant Species Observed On Site | Status | | |
|---|---------------|-------------|-------------|
| | USFWS | CDFG | CNPS |
| southern tarplant | — | — | 1B.1 |
| southwestern spiny rush | — | — | 4.2 |
| California box-thorn | — | — | 4.2 |
| woolly seablite | — | — | 4.2 |

Special Status Biological Resources

| Special Status Wildlife Species Observed On Site | Status | |
|---|--------|----------------------------|
| | USFWS | CDFG |
| San Diego fairy shrimp | FE | – |
| Cooper's hawk | – | WL (nesting) |
| sharp-shinned hawk | – | WL (nesting) |
| northern harrier | – | SSC (nesting) |
| white-tailed kite | – | FP (nesting) |
| osprey | – | WL(nesting) |
| Merlin | – | WL(non-breeding/wintering) |
| California gull | – | WL(nesting colony) |
| burrowing owl | – | SSC |
| loggerhead shrike | – | SSC (nesting) |
| least Bell's vireo | FE | SE (nesting) |
| California horned lark | – | WL |
| coastal cactus wren | – | SSC |
| coastal California gnatcatcher | FT | SSC |
| yellow warbler | – | SSC (nesting) |
| yellow-breasted chat | – | SSC (nesting) |
| Belding's savannah sparrow | – | SE |

Special Status Biological Resources

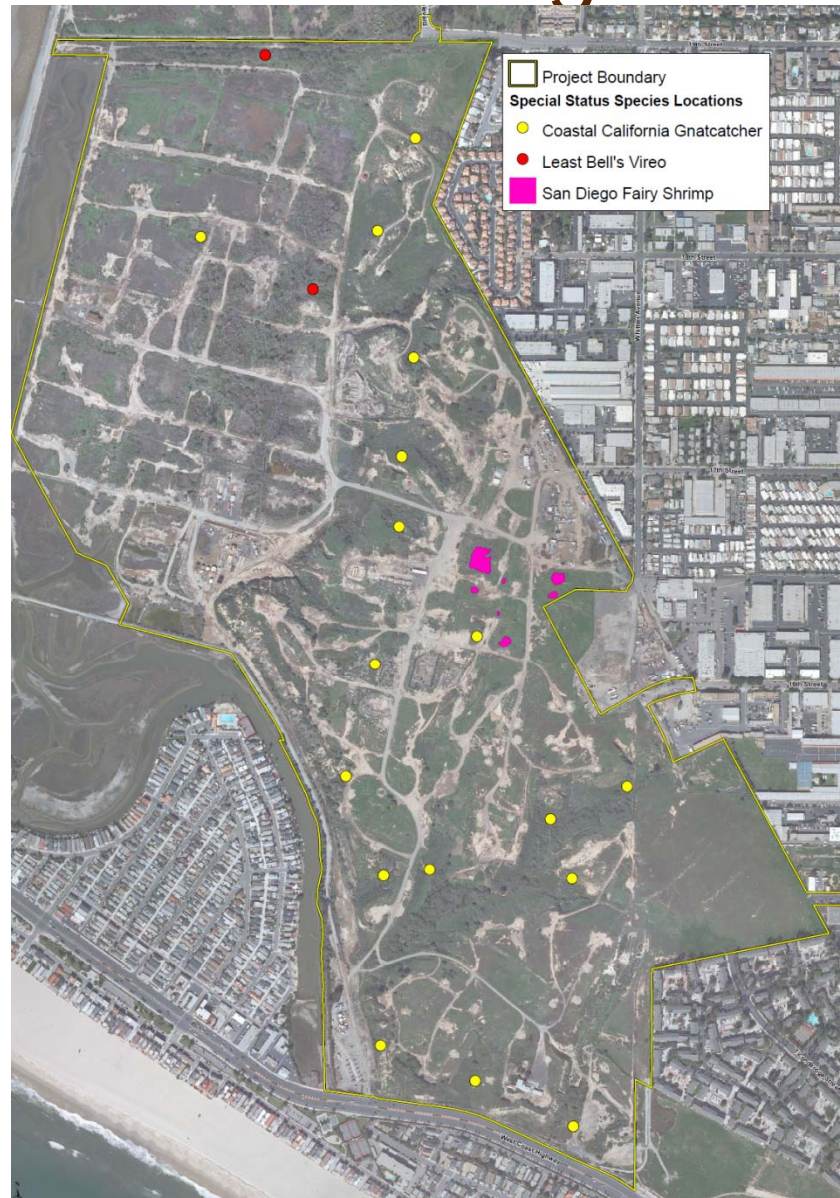
San Diego Fairy Shrimp was found to occur with 7 ponded areas on site: VP1 - VP2 - AD3 -E - G -I - J

Two solitary male **least Bell's vireos** observed in the willow riparian habitats of the lowland during the 2006, 2007, and 2009 focused surveys.

Coastal California gnatcatcher surveys (2009) identified a total of 17 territories, consisting of 16 breeding pairs and 1 solitary male.



Special Status Biological Resources



Special Status Biological Resources

Jurisdictional Areas

53.76 acres of USACE jurisdiction - Approved jurisdictional determination from the USACE on June 3, 2009, based on information in GLA's March 5, 2009 delineation. This delineation was independently verified by BonTerra Consulting.

12.08 acres of CDFG jurisdiction

84.48 acres of California Coastal Commission jurisdiction

Project Design Features

- PDF 4.6-1** Minimum of 220 gross acres of the Project site as wetland restoration/water quality areas, habitat conservation, and restoration mitigation areas.
- PDF 4.6-2** Habitat Restoration Plan provides for the preservation and long-term maintenance of preserved and restored habitat onsite.
- PDF 4.6-3** Habitat Areas that are restored will be subject to a five-year Maintenance and Monitoring Program.
- PDF 4.6-4** A “dark sky” lighting concept will be implemented within areas of the Project that adjoin habitat areas.

Biological Thresholds

- Threshold 4.6-1** Have a substantial adverse effect on any special status species.
- Threshold 4.6-2** Have a substantial adverse effect on any riparian habitat or other special status natural community.
- Threshold 4.6-3** Have a substantial adverse effect on federally protected wetlands.
- Threshold 4.6-4** Interfere substantially with the movement of wildlife.
- Threshold 4.6-5** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Project Impacts

The determination of impacts is based on a comparison of Project maps depicting permanent and temporary impact areas and maps of biological resources on the Project site.

Rough and Precise Grading/Development - permanent impact

Utility Infrastructure - permanent impact

Water Quality Basins - permanent impact

Open Space Trails - permanent impact

Bluff Repair - temporary impact

Vernal Pool Interpretive Area - temporary impact

Consolidated Oil Sites - permanent impact

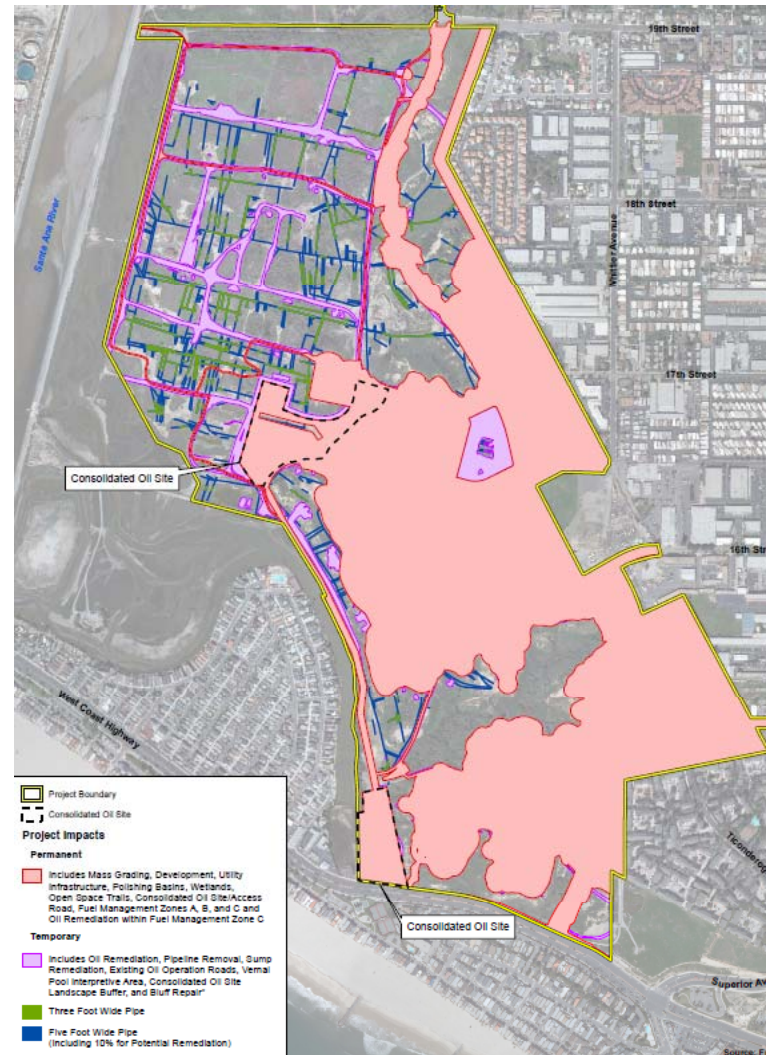
Planting Buffers at Consolidated Oil Sites - temporary impact

Oilfield Remediation and Pipe Remediation - temporary impact

Existing Oil Operation Roads- temporary impact

Fuel Management Zones - permanent impact

Project Impacts



Project Impacts

| Vegetation Type | Existing (Acres) | Total Impacts (Acres) | % Impacted | Area Not Impacted (Acres) | % Not Impacted | Significant Impact Identified | Mitigation Required |
|--|------------------|-----------------------|------------|---------------------------|----------------|-------------------------------|----------------------------------|
| <i>Coastal Sage Scrub</i> | 37.63 | 11.92 | 32% | 25.71 | 68% | Yes | <i>Preservation/ Restoration</i> |
| <i>Disturbed Coastal Sage Scrub</i> | 20.64 | 11.19 | 54% | 9.45 | 46% | Yes | <i>Preservation/ Restoration</i> |
| <i>Grassland and Ruderal</i> | 120.40 | 100.13 | 83% | 20.27 | 17% | Yes | <i>Preservation/ Restoration</i> |
| <i>Grassland Depression Features</i> | 0.40 | 0.13 | 33% | 0.27 | 68% | Yes | <i>Preservation/ Restoration</i> |
| <i>Marshes and Mudflats</i> | 31.45 | 2.45 | 8% | 29.00 | 92% | Yes | <i>Preservation/ Restoration</i> |
| <i>Riparian Scrub/Forest</i> | 21.71 | 2.68 | 12% | 19.03 | 88% | Yes | <i>Preservation/ Restoration</i> |
| <i>Disturbed Riparian Scrub/Forest</i> | 38.87 | 10.25 | 26% | 28.62 | 74% | Yes | <i>Preservation/ Restoration</i> |
| <i>Other Areas</i> | 133.15 | 97.57 | 73% | 35.58 | 27% | No | No |
| <i>TOTAL</i> | 404.25 | 236.32 | 58% | 167.93 | 42% | | |

Wildlife Impacts

General Habitat Loss and Wildlife Loss

- Significant to Local Populations
- Mitigate by Coastal Sage Scrub, Grassland, Vernal Pool, & Riparian Habitat Preservation & Restoration

Impacts to Nesting Birds/Raptors

- Significant for intentional loss of any active nest
- Mitigate by limiting vegetation removal between Feb. 15 – Sept. 15, and construction avoidance measures

Foraging Habitat for Raptors

- Significant impacts to approximately 124.83 acres of foraging habitat
- Mitigate through the restoration & preservation 205.53 acres of various habitats

Foraging/Roosting Habitat for Bat Species

- Significant impacts to the loss of approximately 124.86 acres of foraging & roosting habitat
- Mitigated through the restoration & preservation of coastal sage scrub, grassland habitat, marsh habitat, & riparian areas

Special Status Species Impacts

Southern Tarplant

- Significant loss of approx. 5,000 of 24,747 individuals observed in 2009
- Mitigate: Southern tarplant restoration program (seed collection & re-establishment)

San Diego Fairy Shrimp

- Significant impact to known populations
- Mitigate : Develop & implement a 3.58-acre vernal pool conservation/restoration area

Light-footed Clapper Rail, Western Snowy Plover, and Belding's Savannah Sparrow

- Significant impacts to marsh habitats used by these species
- Mitigate: Restore and/or preserve approx. 9.9 acres of marsh habitat on site or immediately off site and avoidance measures during construction

Coastal California Gnatcatcher

- Significant impacts to approx. 23.11 acres of coastal sage scrub & disturbed coastal sage scrub that provides potential habitat for this species
- Mitigate: Restore & preserve 82.91 acres of coastal sage scrub habitat.

Special Status Species Impacts

Coastal Cactus Wren

- Significant impacts to approx. 2.92 acres of potential habitat
- Mitigate: Restore & preserve 82.91 acres of coastal sage scrub habitat, including approx. 10 acres of coastal sage scrub dominated by cactus

Least Bell's Vireo

- Significant impacts to approx. 2.74 acres of undisturbed & disturbed willow riparian scrub & willow riparian forest habitats
- Mitigate: Restore & preserve 38.8 acres of riparian habitat

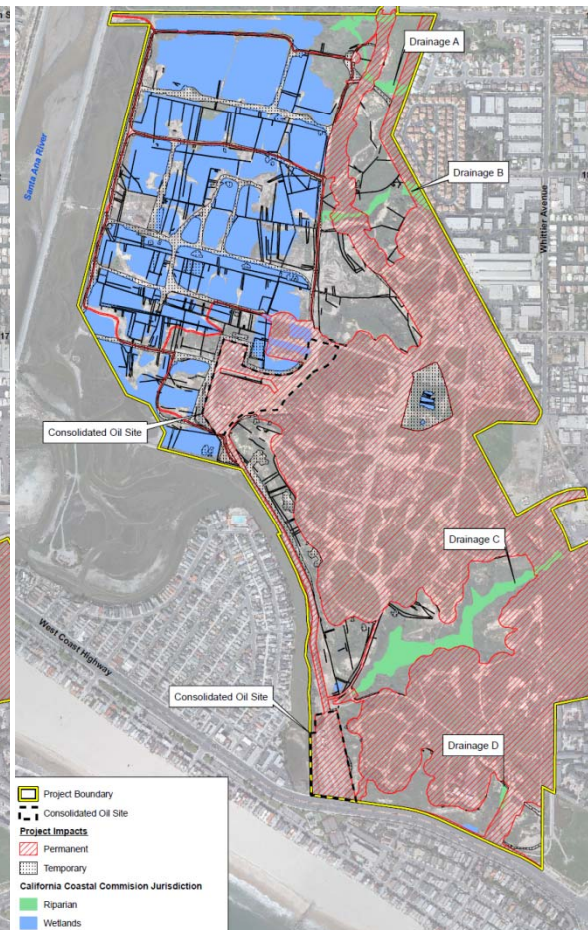
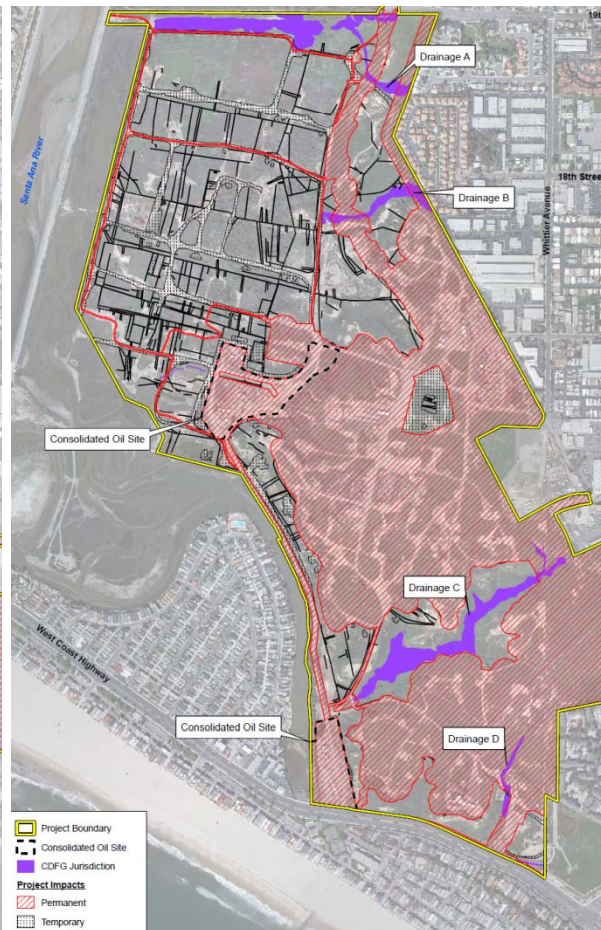
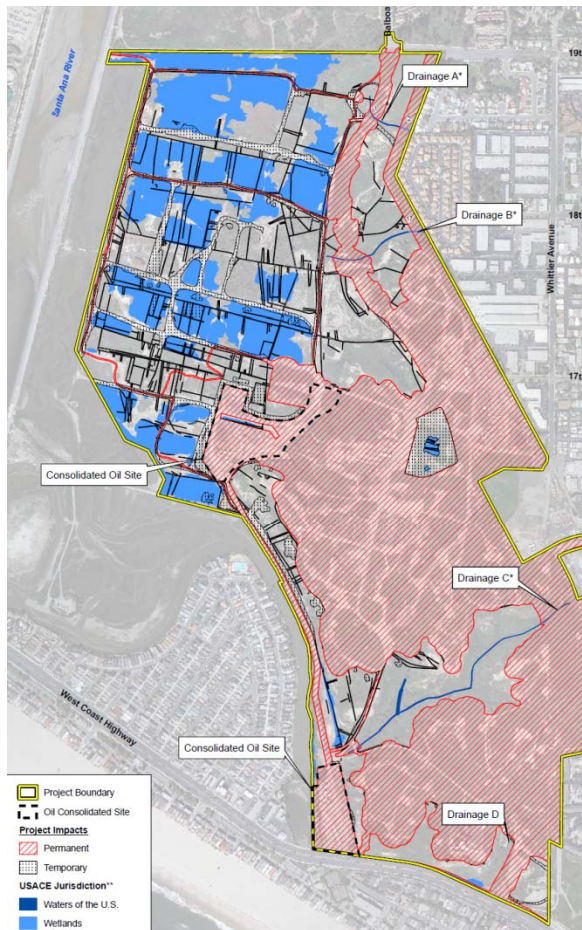
Burrowing owl - only expected to winter based on the 2008, 2009, and 2010 survey results

- Significant impacts to approx. 100.13 acres of grasslands & ruderal habitat
- Mitigate: Restore & preserve 70.34 acres of grassland habitat

Jurisdictional Impacts

| Jurisdictional Features | Permanent Impacts (Acres) | Temporary Impacts (Acres) | Total Impacts (Acres) |
|---|----------------------------------|----------------------------------|------------------------------|
| USACE (Waters and Wetlands) | 0.32 | 3.93 | 4.25 |
| CDFG | 1.87 | 0.05 | 1.92 |
| California Coastal Commission | 2.52 | 6.48 | 9.00 |
| <p>a It is important to note that riparian vegetation types and jurisdictional areas should not be considered as identical resources. Although these resources often overlap, there are many areas on site where the riparian vegetation types are located outside resource agency jurisdiction. As an example, mule fat scrub typically occurs in riparian areas (relating to or located on the banks of a river or stream); however, the majority (96%) of the mule fat scrub impacted on the Project site occurs in upland areas or areas outside jurisdictional boundaries.</p> <p>Note: USACE jurisdictional resource base data was provided by GLA and verified by BonTerra Consulting. CDFG and California Coastal Commission jurisdictional resource base data was provided by BonTerra Consulting.</p> | | | |

Jurisdictional Impacts



CEQA Required Mitigation

HABITAT MITIGATION SUMMARY

| Vegetation Type | Existing (Acres) | Total Impacts (Acres) | Area Not Affected (Acres) | Preservation (Acres) | Restoration (Acres) | Total Preservation and Restoration (Acres) | Preservation/ Restoration to Impact Ratio ^a |
|---|------------------|-----------------------|---------------------------|----------------------|---------------------|--|--|
| Coastal Sage Scrub and Disturbed Coastal Sage Scrub | 58.27 | 23.11 | 35.16 | 35.16 | 47.75 | 82.91 | Approx. 3.5:1 |
| Grassland and Ruderal | 120.40 | 100.13 | 20.27 | 20.27 | 50.07 | 70.34 | Approx. 0.7:1 |
| Grassland Depression Features (includes Features VP1, VP2, AD3, E, G, I, and J) | 0.50 | 0.24 | 0.26 | 0.26 | 3.32 | 3.58 | Approx. 15:1 |
| Marsh | 31.45 | 2.45 | 29.00 | 7.25 | 2.65 | 9.90 | Approx. 4:1 |
| Riparian and Disturbed Riparian | 60.58 | 12.93 | 47.65 | 23.03 | 15.77 | 38.80 | Approx. 3:1 |
| Total | 271.20 | 138.86 | 132.34 | 85.97 | 119.56 | 205.53 | |

^a The preservation/restoration to impact ratio (last column in table) is not a required mitigation ratio. Rather it identifies the ratio that could be achieved.

CEQA Required Mitigation

Other Resource Specific Mitigation Measures

- | | |
|------------------|--|
| MM 4.6-6 | Compliance with Migratory Bird Treaty Act |
| MM 4.6-7 | Re-Establishment of Special Status Plant Species |
| MM 4.6-8 | Light-footed Clapper Rail, Western Snowy Plover, Belding's Savannah Sparrow - Obtain regulatory approvals, avoidance procedures, & replacement of habitat |
| MM 4.6-9 | California Gnatcatcher – Obtain Biological Opinion from USFWS, restore & preserve 82.91 acres of coastal sage scrub habitat; implement Construction Minimization Measures |
| MM 4.6-10 | Coastal Cactus Wren - Avoid habitat, incorporate cactus into the planting palette; implement Construction Minimization Measures |

CEQA Required Mitigation

Other Resource Specific Mitigation Measures

- MM 4.6-11 **Least Bell's Vireo** -** Obtain a Biological Opinion from the USFWS/CDFG, restore and preserve 38.80 acres of riparian habitat; Implement Construction Minimization Measures
- MM 4.6-12 **Burrowing Owl** -** Avoided where possible, restore & preserve 70.34 acres of grassland habitat
- MM 4.6-13 **Raptor Nesting** -** Provide protection for nesting raptors

CEQA Required Mitigation

Other Resource Specific Mitigation Measures

- MM 4.6-14** **Invasive Exotic Plant Species** - Removal of invasive plant species. Landscape Plans reviewed by a Biologist to ensure that no invasive, exotic plant species are used in landscaping adjacent to any open space.
- MM 4.6-15** **Human Activity** - Fencing plan shall be planned & implemented to limit access to the open space within the lowlands. Informational signage provided
- MM 4.6-16** **Urban Wildlands Interface** - Develop & distribute a wildland interface brochure

- Extra Slides



California Vernal Pools



BRC “Vernal Pool” 22: Asphalt Parking Area



Central California Grassland Vernal Pool



BRC “Vernal Pool” 20: Actually in Paved Road



Vernal Pool with swale in early drying phase



BRC “Vernal Pool” 19 – Pond on Road Shoulder



Vernal Pool: drying phase with typical rings of wildflowers



BRC “Vernal Pool” 5: Soil Remediation Stockpile



San Diego Vernal Pool: Dry Phase



BRC “Vernal Pool” 47: Active Oil Well Pad at low point in canyon

